

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A valve structure comprising:
an elastomeric layer defining a flow channel having walls and a deflectable ceiling;
a first electrode positioned on top of the elastomeric layer so as to overlie the deflectable ceiling of the flow channel; and
a second electrode positioned beneath the flow channel, such that application of a potential difference between the first electrode and the second electrode drives the first electrode toward to second electrode, thereby driving the first electrode and the deflectable ceiling of the flow channel into the toward the floor of the flow channel to close the flow channel.
2. (Currently Amended) The valve of claim 1 further comprising a reflective micromirror surface positioned over the deflectable ceiling of the flow channel, wherein a physical orientation of the reflective micromirror surface is altered when the deflectable ceiling of the flow channel is driven into the toward the floor of the flow channel by the first electrode upon application of the potential difference.
3. (Previously Presented) A valve structure comprising:
a first elastomeric layer defining a flow channel having walls and a deflectable ceiling;
a first electrode positioned on top of the first elastomeric layer over the deflectable ceiling of the flow channel;
a second elastomeric layer positioned over the first electrode;
a third elastomeric layer positioned over the second elastomeric layer, the third elastomeric layer defining a control channel having walls and a ceiling, the second elastomeric layer forming a floor of the control channel; and

a second electrode positioned on top of the third elastomeric layer over the control channel, such that application of a potential difference between the first electrode and the second electrode drives the first electrode and the second electrode together, causing the walls of the control channel and of the underlying flow channel to be driven together.

4. (Currently Amended) The valve of claim 3 further comprising a reflective micromirror surface positioned over the deflectable ceiling of the flow channel, wherein a physical orientation of the reflective micromirror surface is altered when the deflectable ceiling of the flow channel is driven into the flow channel.

Claims 5-11. (Canceled)